

**REMARKS**

In the present Amendment, Claim 11 has been amended to recite --discharging the sucked liquid from the same nozzle directly toward the inclination at a discharging position--. This amendment is supported by the specification, for example, in pages 5-6 and Figures.

Claims 18-21 have been added. Claims 18 and 20 are supported by the specification, for example, in the paragraph bridging pages 7 and 8 and Figures. Claims 19 and 21 are supported by the specification, for example, at page 1, the 2nd full paragraph.

Entry of the Amendment is respectfully requested. Upon entry of the Amendment, Claims 1-7 and 11-21 will be all the claims pending in the application.

**I. Response to Rejections Under 35 U.S.C. § 103(a)**

a. In Paragraph No. 1 of the Office Action, Claims 1-5 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Cloud Jr, (US 1,031,562) in view of Chestney (US 4,077,629).

Applicants respectfully traverse the rejection for at least the following reasons.

The Examiner applies Cloud Jr. as the primary reference for teaching a “method in a water gun whereby liquid is manipulated by sucking in a nozzle 11 a fluid and then discharging the fluid from the same nozzle 11.”

However, Cloud Jr. does not disclose or suggest a method in accordance with the present invention. In particular, Cloud Jr. relates to improvements in guns, with particular application to a fluid gun. There is no disclosure or suggestion of discharging fluid from the fluid gun “directly into liquid remaining in the [same] container,” as recited in present independent Claim 1 from which Claims 2-4 depend.

Furthermore, as set forth in Applicants' Response of June 30, 2004, Cloud Jr. is not properly combinable with Chestney. These references each encompass different nonanalogous fields of art, and neither encompasses the field of art of the present invention. Cloud Jr. is directed to an improvement in guns, while Chestney is directed to a sea battle game apparatus involving two or more toy water guns in a pool. Cloud Jr. encompasses a one nozzle fluid gun. Chestney encompasses a totally different design using a hose to draw water from a pool and squirting the water from a water gun nozzle which is a completely different passageway from the intake hose. The Examiner provides no intrinsic motivation from either of these references for their combination. Applicants respectfully submit that there is no motivation to replace the water gun of Chestney, which is more efficient in its two-nozzle design for its game-playing purpose, with the one nozzle fluid gun of Cloud Jr.

Still further, even if there might be motivation to combine Cloud Jr. and Chestney, the combination does not result in the present invention. For example, neither reference, separately or in combination thereof, discloses or suggests at least discharging fluid from the fluid gun "directly into liquid remaining in the [same] container", "to thereby stir the liquid". Chestney teaches squirting water from a water gun for the purpose of filling with water an opponent's toy ship hull.

It would not have been obvious to one of ordinary skill in the art to provide for the use of Cloud Jr.'s water gun where it is used inside a pool container whereby the suction and discharge of the liquid is taken from the same pool water (liquid) and further provide a step of attempting to spray the discharged water away from the user and the point of liquid suction so as to spray an

object or to spray directly onto the pool water surface in order to mix the liquid in the pool.

Applicants respectfully submit that there is no substantial mixing of the pool water.

In view of the foregoing reasons, Applicants respectfully submit that the present invention is not *prima facie* obvious over the cited references and request that the rejection be withdrawn.

b. In Paragraph No. 2 of the Office Action, Claims 1-5 and 7 have been rejected under 35 U.S.C. 103(a) as assertedly being unpatentable over JP 62184357 (JP '357) in view of Qureshi et al (U.S. Pat. No. 5,383,372).

Applicants respectfully traverse the rejection.

In particular, Applicants respectfully submit that the combination of JP '357 and Qureshi does not disclose or suggest each and every element of the present invention. For example, neither reference, separately or in combination thereof, discloses or suggests at least "discharging the sucked liquid ...directly into liquid ...at a discharging position which is horizontally different from a sucking position... to thereby stir the liquid".

Although the Examiner believes that the process of mixing as taught by JP '357 would have inherent variations in the horizontal and vertical positioning of the hand held pipette nozzle by the user when performing the suction and discharge since the human hand may not readily replicate an exact positioning of a machine, this is not disclosed or suggested in JP '357, and it is not necessarily the case that any horizontal positioning would be different. Therefore, Applicants traverse that there is no inherent variation.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a).

c. In Paragraph No. 3 of the Office Action. Claims 6 and 11-17 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over JP 62184357 (JP '357) in view of Qureshi et al (U.S. Pat. No. 5,383,372) as applied to Claim 1 above, and further in view of Makino et al (U.S. Pat. No. 5,555,767).

Applicants respectfully submit that the amended claims are not obvious over the cited references for the reasons set forth above because Makino fails to rectify the deficiencies of JP '357 and Qureshi as described above. In particular, none of these references, separately or in combination thereof, discloses or suggests at least “discharging the sucked liquid ...directly into liquid (or toward the inclination) ...at a discharging position which is horizontally different from a sucking position... to thereby stir the liquid”.

Makino discloses a method of mixing a small amount of a liquid sample 1 with a second liquid 2. For this purpose, the liquid sample 1 may be introduced into a container by bringing a droplet of the liquid sample 1 into contact with the inclined inner wall of a container (see Fig. 4B). The second liquid 2 is then introduced onto the liquid sample 1 to mix and stir both liquids. The second liquid 2 is introduced into the container 24 by moving a pipette 12 containing the second liquid 2 toward the inner wall of the container 24 when the liquid sample 1 is placed on the inner wall of the container 24.

Makino also teaches that the resulting mixed liquid can be sucked and discharged for a uniform mixing (see col. 8, lines 34-40). However, as clearly shown in Figs. 2F-2G, the repeated

suction and discharge steps take place with the pipette 12 immersed in the liquid and positioned in the same horizontal position (see Figs. 2F-2G and col. 8, lines 34-40).

Although Makino teaches a horizontal movement of a pipette to introduce a liquid from outside into a container as well as a repeated suction and discharge step by using the pipette, which is immersed in the liquid in the same horizontal position, Makino does not provide motivation to perform the repeated suction and discharge by horizontally moving the pipette. Nowhere in Makino is there a teaching or suggestion that the pipette containing a liquid, which is sucked from a container, is moved horizontally from a sucking position to another position where the liquid is discharged back into the container for a more efficient stirring.

Applicants previously submitted a Declaration Under 37 C.F.R. § 1.132 which includes data demonstrating the advantages of using the mixing method according to present Claim 1 as compared to the mixing method as disclosed by Makino.

Specifically, the results in the Declaration show that the method of making the present invention according to Conditions A and D is superior to the method of Makino according to Conditions C and F in which sucking and discharging are carried out while the top of the nozzle is sunk in the liquid. Makino discusses that the stirring effects by sucking and discharging at the same position in the same liquid are not clear (see col. 12, lines 19-40 and col. 13, lines 46-49). In the present invention, this point is clarified.

When the liquid is sucked from the container and discharged into the same container, it is apparent from the comparison of the results between Conditions A and B and the comparison of

the results between Conditions C and D and that the horizontal movement of the nozzle according to the present invention provides stirring having excellent effects.

In the present invention, the same effects can be obtained in Condition D in which the sucked and discharged amount is small, similar to the effects in Condition A in which the sucked and discharged amount is large. On the other hand, in Conditions B, C, E and F, the effects are insufficient, even if the top of the nozzle is in the air when the liquid is discharged.

Accordingly, the comparative data set forth in the previously submitted Declaration is evidence of the unexpected superiority of the invention not expected in view of the prior art.

In view of the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a).

## **II. Response to Double Patenting**

In Paragraph No. 4 of the Office Action, the Examiner states that should Claim 6 be found allowable, Claims 11 and 16 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof.

Applicants respectfully traverse the double patenting rejection for at least the following reasons.

Claim 6 is dependent from Claim 1, and Claim 1 recites that the sucked liquid is discharged directly into liquid remaining in the container. On the other hand, Claim 11 recites that the sucked liquid is discharged directly toward the inclination, and it is not defined whether the liquid is present on the inclination. Accordingly, Claims 11 and 16 are not a substantial duplicate of Claim 6.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the double patenting criticism.

**III. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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